

On Dreams: between Neuropsychology and Theological Considerations

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Abstract: This study is a comparative analysis between a neuropsychological perspective on dreams and a theological one that tries to better understand the manifestation of dream revelations. In the first phase is presented the natural physiology of sleep with its related stages (REM and NREM). Then we move on to the description of the manifestation of ordinary dreams and their functional role for the optimal parameters of our thinking, memory and behavior. The paper also presents some main theories about dream activation in the fields of neuropsychology. Subsequent research includes the theological perspective on people's trust in dreams. At the same time, there are presented the most illustrative Bible cases which include dreamlike revelations in the Old and the New Testament. After that, we will discuss and analyze both the phenomenon of *incubatio* (healing dreams), found in Eastern and Western Christianity, in the 1st millennium AD, as well as some events focused on the discovery of holy relics following some providential dreams. In conclusion, the research will show how people, and especially religious practitioners, can relate correctly to certain atypical dreams they have at some point in their lives.

Keywords: REM/ NREM sleep, functional role of dreams, limbic system, prefrontal cortex, brainstem, forebrain, healing dreams, revelations, holy relics.

Dreams: a short introduction. Sleep cycles and NREM/REM stages

We begin our analysis by saying that sleep (which involves the vital stage of rest and regeneration of the body) delights everyone, while dreams, as spatio-temporal

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mental fables, arouse a high curiosity for almost all of us. We say this because, since ancient times, dreams have been seen one by one as a gateway to the afterlife, episodes with oracular function, a wandering of the soul while the body rests in bed, a realm of revelation or a brief reunion with our deceased relatives or loved ones, etc.

Until the 19th century, dreams were often loaded with a mystical allure by the common people, but from this period until now the dreamy episodes of the night began to be intensely analyzed by psychology, medicine and anthropology in an objective and empirical manner. It was not until the middle of the 20th century that the study of sleep and dreams allowed a more detailed quantification and statistical taxonomization of all oneiric episodes. This fact led to developing some interesting neuropsychological functional theories in this regard.

Since the 1950s, American researchers have found using EEG (Electroencephalogram) and EOG (Electrooculogram) measurements that dreams are of many kinds depending on the ambivalence of the overnight sleep². Sleep therefore begins with an NREM stage (*Non Rapid-Eye-Movements*) associated with moments of light to deep rest, improving the immune system and cell regeneration following the physical or mental efforts of the previous day. It should be noted that this sleep interval consists of 4 sub-stages, namely N1 (light sleep), N2 (restful sleep) and the pair of N3-N4 (deep sleep)³. This stage of NREM sleep lasts about 70-90 minutes, being succeeded by a distinct phase of sleep that extends for ca. 10-20 minutes which is called "paradoxical sleep" or REM sleep (*Rapid-Eye-Movements*).⁴ As its first name suggests, this particular phase is a less restful sleep, as the sleeping individual has now a slight acceleration of subconscious thinking that often interferes with the activation and manifestation of dreams. This stage also involves the quick movements of the eyes while they are closed because now the individual is seeing or thinking at something in his/ her dreams.

To better understand the alternation between wakefulness and sleep state, let's take as an example, the decreasing hierarchy of brain waves associated with distinct frequencies. Thus we have the Beta waves (with a frequency between 12-32 Hz), Alpha waves (8-12 Hz), Theta waves (4-8 Hz) and Delta waves (0.1-3.5 Hz)⁵, each of which is

² Eugene ASERINSKY, Nathaniel KLEITMAN, *Regularly Occurring Periods of Eye Motility, and Concomitant Phenomena during Sleep*, in: *Science*, CXVIII, 3602, pp. 273-274.

³ Eric SUNI, Nilong VYAS, *Stages of Sleep*, in: *Sleep Foundation*, Updated: 20.12.2021, Accessed: 19.1.2022, at: <https://www.sleepfoundation.org/stages-of-sleep>.

⁴ David HARTMAN, Diane ZIMBEROFF, *REM and Non-REM Dreams: Dreaming without a Dreamer*, in: *Journal of Heart-Centered Therapies*, XV (2012), 2, pp. 27-52, (pp. 27-28). See also Patrick MCNAMARA, *The Neuroscience of Sleep and Dreams*, Cambridge University Press, Cambridge/ New York, 2019, pp. 31-32.

⁵ Eva SVANBORG, Christian GUILLEMINAULT, *EEG Frequency Changes During Sleep Apneas*, in: *Sleep*, XIX (1996), 3, pp. 248-258.

associated with a certain conscious or unconscious mental activity. If Beta waves are associated with intense mental processes in the waking state, the deep sleep (N3-N4) corresponds to Delta waves (also known as *Slow-Wave-Sleep/ SWS*), while dreams are often associated with alternating Theta and Alpha frequencies⁶. Finally, the alternation of NREM and REM stages forms a sleep cycle that repeats 5-6 times per night. This alternation is usually detected on a hypnogram (see Figure 1) when a person's sleep is measured using EEG devices. Depending on these kinds of sleep, the color of dreams also changes. Thus, dreams are 90% more intense, atypical, surprising, emotional and dynamic during the REM phase, while the NREM stage involves a dream activity in a percentage of 5-10% with monotonous, quiet and faded oneiric episodes⁷.

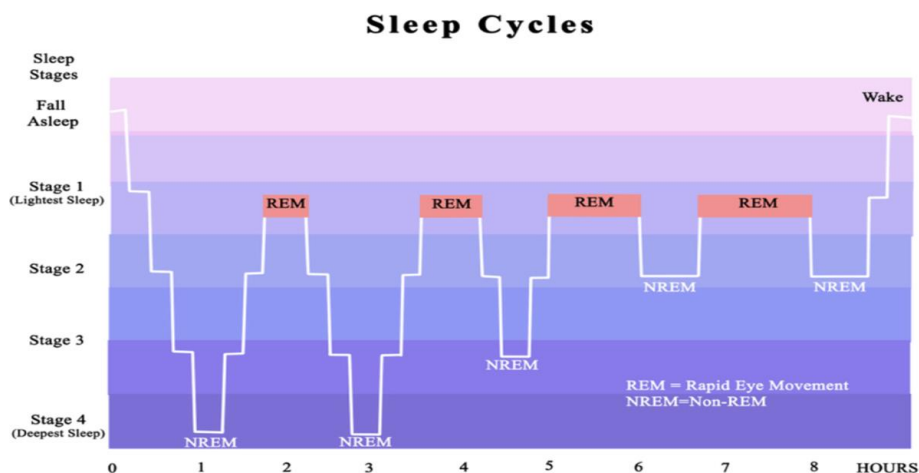


Figure 1. A hypnogram which shows us the sleep stages per night of a certain individual.⁸

Some dream activation theories in neuropsychology

Let us talk for a while about a more enigmatic aspect of dreams that has probably interested us since the time of our childhood, namely how dreams are born. There are several theories in this regard. One of them says that the REM stage begins when dream images and other chaotic sensory signals are generated by the brainstem, especially by

⁶ Michael SCHUPP, Christopher D. HANNING, *Physiology of Sleep*, in: *British Journal of Anaesthesia*, III (2003), 3, pp. 69-74 (p. 71).

⁷ Alan S. EISER, *Physiology and Psychology of Dreams*, in: *Seminars in Neurology*, XXV (2005), 1, pp. 97-105, (p. 98), Robert HOSS, *Neuropsychology of Dreaming: Studies and Observations Dreaming and Sleep States* (2014), pp. 1-18 (pp. 1-2).

⁸ Source: *Sleep Patterns across the Human Lifecycle*, published 20.12.2016, Accessed 10.1.2022, at: <https://www.thegreatcoursesdaily.com/sleep-across-lifecycle/>.

the Pons Varolii, and sent first to the structures of the midbrain and then to the forebrain. Once these signals are received (which in Freud's opinion are no more than remnants of everyday experiences⁹), the forebrain begins to interpret these signals and give them its own coherence, thus integrating them into a well-organized dream scenario from a spatial-temporal dimension. In other words, dreams are an attempt by the anterior brain to assign a certain meaning to the multitude of sensorial stimuli received during the day. Briefly speaking, this is the activation-synthesis theory developed in 1977 by American psychiatrists J. A. Hobson and R. McCarley¹⁰.

However, although consistent, the general theory issued by the two Harvard researchers has been called into question, and its most representative challenger is Mark Solms, both professor and neuroscientist at the University of Cape Town. In 2000, he developed a study on the generation of dreams during sleep, basing his research on observational studies performed on patients with brain damages. Thus, Solms showed that the part of the brain that triggers dreams is not the brainstem, as the 1977 theory pointed out, but the upper parts of the brain, also known as the forebrain. At the same time, the study from 2000 also shows that patients with lesions in the area of the brainstem experience normal dreams, like the rest of the ordinary people.¹¹ Also, lesions in the visual cortex (located in the occipital lobe) and unilateral or bilateral lesions of the temporo-parietal junctions (TPJ – with a role in the formation of spatial orientation) lead to the cessation of dreams. Solms adds that damage to the ventromedial frontal cortex and especially the mesolimbic / mesocortical dopaminergic system (which includes the ventral tegmental area, hypothalamus, amygdala, ventral striatum, cingulate gyrus, and frontal cortex) also lead to cessation of dreams.

The explanation is that the frontal ventromedial cortex connects the circuits of the limbic system. This limbic system is the one which connects the dopaminergic mechanisms of the brain to its frontal regions associated with the center of thought and decision. Also, the transverse lesions, damages or inhibition by medication (e.g.: antipsychotics or antidepressants) of this dopaminergic circuit leads in turn to a

⁹ Sigmund FREUD, *Despre interpretarea viselor*, în: *Opere esențiale*, vol. 2, trad. Roxana Melnicu, Ed. Trei, București, 2009, pp. 289, 654.

¹⁰ John Allan HOBSON, Robert MCCARLEY, *The Brain as a Dream State Generator: An Activation-Synthesis Hypothesis of Dream Process*, in: *The American Journal of Psychiatry*, CXXXIV (1977), 12, pp. 1335-1348.

¹¹ Cf. Mark SOLMS, *Freudian Dream Theory Today*, in: *The Psychologist*, XIII (2000), 12, pp. 618-619, (p. 618). Solms pleads that the brainstem lesions led to the stopping of the REM stage, but not to the appearance of dreams in the case of 4 patients who had brainstem damages. Also, in the case of 108 patients with forebrain lesions (especially 94 of them suffering from TPJ damages), dreams ceased to occur during sleep, see also Mark SOLMS, *Dreaming and REM Sleep are Controlled by Different Mechanisms*, in: *Behavioral and Brain Sciences*, XXIII (2000), 6, pp. 843-850 (pp. 845-846).

significant reduction in the imagination and determination which produces inability of the individuals to develop and complete even the simplest plans¹². In other words, we are talking about a high state of apathy.

Secondly, the cross-sections applied to certain parts of the dopaminergic circuit or its drug inhibition lead to the relief of schizophrenic hallucinations, those manifestations being quite similar to dreaming¹³. Last but not least, patients with severe apathetic condition have been shown to have no dream activity¹⁴, while the use of stimulants, such as Levodopa (L-dopa) used in the treatment of Parkinson's disease, has side effects such as increased psychotic states and also intense dreaming and nightmares¹⁵. But above all, the neural circuits in the anterior brain that cause the onset of oneiric episodes are not common with the generation of the REM stage by Pons Varolii in the brainstem, as mentioned previously. Therefore, all these explanations lead to the fact that REM sleep is only the general framework of dreams, but not their equivalent.

Functional dream theories

Sigmund Freud's most famous treatise on the interpretation of dreams (published in 1900), mentions that dreams do nothing but to show us our repressed hedonic desires and impulses. Briefly speaking, Freud's theory applies to the tripartite view of the psyche/ soul composed of the Id (the part focused on satisfying impulses and pleasures), the Ego (representing the rational dimension of the psyche), and the Superego (representing the court that censors the Id's activity and focuses on assuming the moral codes; we can see the Superego as an accusatory conscience). Therefore, Freud says that dreams are in fact desires or impulses of the Id repressed by the Superego in the waking state. These dreams do not disappear, but are repressed in the unconscious, manifesting at night in the form of a disguised dream by several symbols.¹⁶

For Freud, dreams are "the royal path to the unconscious", that is, a regressive process to enter where the Superego cannot act. Thereby, Freud says that when we sleep, dreams represent our desires and impulses repressed during the day, but many of these desires can be disturbing at some point; so their beautification is required. Thus, during sleep, a certain kind of censor intervenes which transforms the impulses of the Id in a

¹² Jan FRANK, *Clinical Survey and Results of 200 Cases of Prefrontal Leucotomy*, in: *Journal of Mental Science*, XCII (1946), 388, pp. 497-508 (p. 508).

¹³ Mark SOLMS, *Dreaming and REM Sleep...*, p. 847.

¹⁴ *Ibid.*, p. 847.

¹⁵ See more in B. SCHARF, Ch. MOSKOVITZ, M. D. LUPTON, *Dream Phenomena Induced by Chronic Levodopa Therapy*, in: *Journal of Neural Transmission*, XLIII (1978), pp. 143-151 and Paul A. NAUSIEDA, William WEINER, Linda R. KAPLAN et alli, *Sleep Disruption in the Course of Chronic Levodopa Therapy: an Early Feature of the Levedopa Psychosis*, in: *Clinical Neuropharmacology*, V (1982), 2, pp. 183-194.

¹⁶ See S. FREUD, *op. cit.*, pp. 413-471.

more acceptable form so that the sleep continues to flow in normal parameters. This type of dream is the *manifest dream* (a kind of allegorical / symbolic dream), different from the *latent dream* (synonymous with nightmares). The second one gathers in itself the raw form of the bizarre, absurd and scary impulses (or even selfish pleasures) generated by the Id and causes nightmares and fragmentation of sleep if the *latent dream* manifests as such. That is why Freud said dreams with manifest content are an effective *guardian of sleep*.¹⁷

In turn, the *manifest dream* is based on several mechanisms of masking the primary impulses. The first is *condensation*, meaning two or more latent ideas/ elements/ images are combined to render a single manifest element (e. g.: a person we interact with in a dream can have a hibrid face borrowing some disparate features from our best friend, from our father and from our work colleague). The second is *displacement*, that is the shift of attention from one main wish (i. e. latent element) to a symbolic image (i. e. manifest element). Here we are talking about Freud's strange theory in which the long convex elements allude subliminally to the male reproductive organs, while the concave shapes of objects to the female ones. The mechanism of *displacement* has the function of censoring dreamlike images and this is why our dreams are often symbolic. The third mechanism is the *representation* which has the role of transforming thoughts into visual elements. These are the three basic mechanisms described by Freud that underlie the formation of dreams.¹⁸

Compared to his mentor, Carl Jung had a different opinion. Beyond Jung's theory of archetypes or the collective unconscious, which says that dreams are archaic remnants of the mental and cultural patterns inherited from our parents and ancestors¹⁹, Jung pleads that dreams have a special function, namely the formation of the individuation process. In Jungian individuation, dreams reconcile our conscious identity with our unconscious self in order to reach the fullness of the human being.²⁰ It is a kind of regression in the oneiric universe to discover the authenticity of our own personality or our lost identity.

Quantitatively speaking, we have more tense dreams and even nightmares compared to the number of common dreams. In the last decades, some researchers showed that the functional role of nightmares (taking up approx. 70-80% of all

¹⁷ S. FREUD, *op. cit.*, pp. 286, 662.

¹⁸ See more about these mechanisms in S. FREUD, *op. cit.*, pp. 335-440 and Wei ZHANG, Benyu GUO, *Freud's Dream Interpretation: A Different Perspective Based on the Self-Organization Theory of Dreaming*, in: *Frontiers in Psychology*, IX (2018), 1553, pp. 1-4.

¹⁹ Carl Gustav JUNG, *Analiza viselor*, trad, introd, note Jean Chiriac, Ed. Aropa, București, 1998, p. 95.

²⁰ Carl Gustav JUNG, *Amintiri, vise și reflecții*, trad. Daniela Ștefănescu, Ed. Humanitas, București, 2020, p. 468, Lena SAYED, *The Function of Dreams and Dreaming: Moving towards an Integrated Understanding*, University of Oslo, 2011, p. 24.

dreams²¹) is to subconsciously simulate certain skills that can make us more effective in managing dangers, and to get rid of them by mastering certain stressful situations. This theory is called the *threat simulation theory* developed in 2000 by Antti Revonsuo.²²

Similar to the mechanism of action but different in terms of content and emotional perception, there is also the *problem-solving theory*. It seeks to demonstrate that dreams can, to some extent, seek solutions to certain theoretical or practical problems that we cannot solve in the waking state. This is due to the subconscious's highly creative ability, but also to its ability to quickly access distant, disparate events and memories that we believe we have completely forgotten.²³ Thus, we can explain how it was possible for Dmitry Mendeleev to draw up his final table of the chemical elements in a dream spent on the night of February 17, 1869²⁴. There is a similar case regarding the discovery of acetylcholine in Otto Loewi's dream one night in 1921, Loewi being awarded the Nobel Prize for its discovery fifteen years later, namely in 1936²⁵.

A last functional theory belongs to Jie Zhang elaborated in 2005. The theory is that dreams have the effect of settling our information, skills, and memories from short-term memory to long-term memory. How do they do that? The answer lies in the close relationship between dreams and procedural memory, that is, a special type of memory that deals with implicit actions (those performed on autopilot mode) that no longer require conscious effort and increased attention on our part. It must also be said that this type of memory belongs to the sphere of the subconscious. This is why dreams transfer all the information necessary for freshly learned actions to be easily assumed and executed in a long-term future.²⁶ Among the actions related to procedural memory, we briefly list swimming, driving a car, tying shoelaces, cycling, etc.

Biblical dreams

We begin by saying that the Bible itself abounds in revelatory dreams in which God or the angels communicate something to the righteous or the saints in the Old and New Testament. Thus, the vision in which the angels of God ascend and descend on a ladder between Heaven and Earth is revealed in Jacob's dream (*Genesis* 28: 10-22).

²¹ P. MCNAMARA, *op. cit.*, p. 127.

²² Antti REVONSUO, *The Reinterpretation of Dreams: an Evolutionary Hypothesis of the Function of Dreaming*, in: *Behavioral Brain Sciences*, XXIII (2000), pp. 877-901 (p. 878).

²³ I. BIBERI, *op. cit.*, p. 66.

²⁴ Deirdre BARRETT, *Dreams and Creative Problem-Solving*, in: *Annals of the New York Academy of Sciences*, MCDVI (2017), 1, pp. 64-67 (p. 65).

²⁵ Otto LOEWI, *An Autobiographical Sketch*, in: *Perspectives in Biology and Medicine*, IV (1960), 1, pp. 3-25, (P. 17), Alli N MCCOY, Siang Yong TAN, *Otto Loewi (1873–1961): Dreamer and Nobel Laureate*, in: *Singapore Medical Journal*, LV (2014), 1, pp. 3-4.

²⁶ See Jie ZHANG, *Continual-Activation Theory of Dreaming*, in: *Dynamical Psychology* (2005), pp. 1-6 (pp. 2-3).

Joseph himself, the son of Jacob, is an illustrious dream interpreter, and based on his correct predictions, he manages to save the land of Egypt from a long period of famine (see *Genesis* chap. 41). King Solomon himself receives wisdom from God through a revealing dream he had in Gibeon (1/ 3 *Kings*, chap. 3). The prophet Daniel has a dream vision in which he foresees the temporary realms of the four kings, identified with four beasts, and also the eternal Kingdom of the Son of Man (*Daniel* chap. 7). Interesting is another aspect found in the *Book of Numbers* which says that, unlike Moses with whom God spoke directly, God will reveal to the prophets certain divine mysteries or future events through dreams (*Numbers* 12: 6).

In the New Testament, several providential dreams take place in the context of the Christ's birth and His childhood. Thus, Joseph is warned in a dream by an angel not to leave Mary because the baby in her womb is from the Holy Spirit (*Matthew* 1: 19-20). Then the three Magi are warned in a dream not to return to king Herod to inform him the place where baby Jesus lives (*Matthew* 2:12). Interestingly to add, the three Wise Men or Magi most likely had a collective or even a telepathic dream in which God instructed them to take another path to their homeland. Next, Joseph is told by an angel in a dream to take Jesus and His mother to fly to Egypt because Herod is about to kill the babies in Bethlehem (*Matthew* 2: 13-14) and – after a few years spent in Egypt – Joseph is also notified in a dream to return to Judea (*Matthew* 2:19). Also, the return to the homeland does not happen by chance. Another dream warns Joseph to leave Judea and to settle in Galilee (more precisely in Nazareth). By that time Judea was ruled by Archelaus who was the son of Herod and thus Jesus was in danger. Last but not least, Claudia Procula (Pilate's wife), dreams at night that Jesus is a man of God and not an evildoer and a blasphemous as his accusers said (*Matthew* 27: 19).

There are two other cases in the *Acts of the Apostles* that we can not know for sure if they are nightly visions (spent in the waking state or prayer, etc.) or just dreamlike revelations. Thus, the apostle Paul is part of a vision occurred in the middle of the night in which a righteous man asks him to come to Macedonia to help the local Church established there (*Acts* 16: 9-10). Paul has another nightly revelation in which the Lord tells him not to be afraid to preach in Corinth, for no one will harm him (*Acts* 18: 9-10).

Should we trust dreams or not?

In the Church history, we have also numerous cases of dreams that led to either a healing or divine discovery. But what does Christian teaching tell us about trust in dreams? If we examine the Patristic writings and the Canon Law, we will see the Church has always been reluctant to dream revelations or at most has recommended wise judgement and caution. And this uncertainty is related to the fact that a dream perceived as mystical can have causes such as a rich imagination or a bad influence from demons

who often appear disguised as angels of light to deceive people (2 *Corinthians* 11:14).²⁷ *The Book of Ecclesiasticus* (of Jesus ben Sirach) says something similar about believing in dreams: "Those who pay attention to dreams are just like people who grasp at a shadow or pursue the wind" (*Sirach* 34: 2), a quote very similar to St. John Climacus († 649) who teaches us that "He who believes in dreams is utterly unskilled, and he who does not believe them is a philosopher".²⁸

Even modern science shows that dreams represent a dissociated and anarchic thinking, an imaginative deception, a reality emancipated from the laws of logic, biology and social norms. This fact happens because the dreams are too focused on emotion and rarely on reason.²⁹ Dreams chaotically recycle all fears, desires, and information from the previous day or from our recent past.³⁰ And this is due to the fact that the activity of the prefrontal cortex (with a significant role in rational processes and the formation of critical sense) is absent, while emotional structures are intensely activated during dreaming.³¹

That is why the Church has established since the 5th century onward that "altars which have been erected anywhere on account of dreams or inane quasi-revelations of certain people, should be in every way disapproved of" – says the 83rd canon of the Council of Carthage (419 AD).³² In the first Christian centuries, mystical experiences were perceived as a vision spent in the waking state and very rarely in a dream.³³ However, in addition to the adoption of mystical discoveries in the dreams of the faithful, there were also works written by patristic figures that accredited the validity of dream revelations. We will not be able to discuss all the examples in the patristic works because the analysis could be extended to a PhD thesis. The most illustrative example is

²⁷ See also DIADOH AL FOTICEII, *Cuvânt ascetic despre viața morală, despre cunoștință și despre dreapta socoteală duhovnicească, împărțit în 100 de capete*, 37, în *Filocalia*, vol. 1, trad., introd., note de Pr. Dumitru Stăniloae, Ed. Humanitas, București, 2017, p. 305.

²⁸ SF. IOAN SCĂRARUL, *Scara dumnezeiescului urcuș*, III, 44, în: *Filocalia*, vol. 9, trad., introd., note de Pr. Dumitru Stăniloae, Ed. Humanitas, București, 2017, p. 74.

²⁹ See Ion BIBERI, *op. cit.*, pp. 18, 20-21, 70-71, Ștefan ODOBLEJA, *Psihologia consonantistă*, trad. P. Iacob, Ed. Științifică și Enciclopedică, București, 1982, p. 288.

³⁰ John Anthony MCGUCKIN, *Dicționar de teologie patristică*, trad. Dragoș Dâscă, Ed. Doxologia, Iași, 2014, p. 538.

³¹ A. R. BRAUN, T. J. BALKIN, N. J. WESENSTEN et alii, *Dissociated Pattern of Activity in Visual Cortices and their Projections during Human Rapid Eye Movement Sleep*, in: *Science*, CCLXXIX (1998), 5347, pp. 91-95, (p. 91), R. HOSS, *op. cit.*, p. 3, M. SOLMS, *Dreams and REM Sleep...*, p. 847, Martin SELIGMAN, Amy YELLEN, *What Is a Dream?*, in: *Behaviour Research and Therapy*, XXV (1987), pp. 1-21 (p. 4).

³² Arhid. Prof. Dr. Ioan N. FLOCA, *Canoanele bisericii ortodoxe: note și comentarii*, ed. a III-a, Ed. Deisis, Sibiu, 2005, pp. 307-308.

³³ J. A. MCGUCKIN, *op. cit.*, p. 540.

given by the Saints Diadoch of Photiki († 5th c.)³⁴ and Simeon the New Theologian († 1022)³⁵. They both say that the more ascetic and pure a man is, the more spiritual his dreams are. Otherwise, these saints warn us that the fleshly and the psychic people should not trust too much in their dreams. It is somewhat easy to understand. In a dream, the mind processes the most significant information and experiences from the previous day, but if neither our daily actions are generally spiritual, nor will our dreams be the same. Usually an intense dreamlike emotion can give us a false state of a revelation – which is only an ecstasy of the body – due to a limited sensational and biochemical experience caused by the action of monoamine neurotransmitters such as norepinephrine (for stressful emotions, e. g.: anger and fear), dopamine (for joy) or serotonin (for sadness or guilt)³⁶. This type of emotional episode is very different from a transcendental experience in which the soul interacts with the divine grace that belongs to the spiritual dimension of life without fleshy and material bounds, and also without error and sin.³⁷

Revealing and healing dreams in the Church history

Since revealing dreams are an undeniable reality, let us see how many such cases does the history of Christianity include in its ascetic-mystical experience during two millennia of existence. We begin by telling that in the 2nd and 3rd centuries there are some testimonies about nightly visions through dreams. We see Hermas (cca. 90-150 AD) receiving some revelations through his dreams after a period of fasting and prayer. Also, some saints – especially martyrs – such as Perpetua from Carthage († 203), Polycarp of Smyrna († 155), Cyprian of Carthage († 258) and the soldier Basilides († 205) are told by the day of their earthly ending in their dreams and mystic visions.³⁸

A prophetic dream takes place in the context of St. Augustine's conversion to Christianity. It is worth mentioning the dream did not belong to Augustine († 430), but to his mother, St. Monica († 387), who had long lamented her son's wandering in the Manichaean religion. After many prayers, the woman is assured by God in a prophetic

³⁴ Sf. DIADOCH, *Cuvânt ascetic...*, 38, p. 305.

³⁵ Sf. SIMEON NOUL TEOLOG, *Cele 225 de capete teologice și practice*, în *Filocalia*, vol. 6, trad., introd., note Pr. Dumitru Stăniloae, Ed. Institutului Biblic și de Misiune Ortodoxă, București, 1977, pp. 81-82.

³⁶ Fushun WANG, Jiongjiong YANG, Fang PAN et alli, *Neurotransmitters and Emotions*, in *Frontiers in Psychology*, XI (2020) 21, pp. 1-3 (p. 2).

³⁷ Cf. Cezar-Ivan COLIȚĂ, *Visul taumaturgic în istoria Bisericii: o moștenire păgână sau o practică eminamente creștină?/ Healing Dream in the Church History: a Pagan Heritage or a Solely Christian Practice?*, în: Mihai Himcinschi, Alexandru Agignoei (ed.), *Direcții și teme de cercetare în teologia contemporană*, vol. 1, Ed. Reîntregirea, Alba-Iulia, 2022, pp. 239-251 (p. 241).

³⁸ Robert WISNIEWSKI, *Looking for Dreams and Talking with Martyrs: the Internal Roots of Christian Incubation*, in: *Studia Patristica*, LXIII (2013), pp. 203-208 (p. 205).

dream that she must not fall into despair because "where you are, there he will be" – words which foreshadow Augustine's conversion in the future years.³⁹

We will discuss now about the dreamy healings that took place in Late Antiquity, especially in the churches dedicated to the holy unmercenary physicians, often invoked in the service of the Holy Anointing. This phenomenon known as *incubatio* was widely spread in early Christianity in which many sick people engaged in pilgrimages to churches dedicated to these saints (usually martyrs) known for their relics that were performing miracles. The pilgrims spent a whole night sleeping near the grave of these martyrs or next to their coffin which contained the holy relics of these special saints. During these hours spent in the church or courtyard, the sick people fell asleep next to the body of the saint in the hope that they would be healed by a wonderful intervention from the spiritual patron of the church. Healing often came after experiencing a providential dream in which the saint announced the sick individuals about their miraculous recovery. Other times the saint offered healing following an advice (medical or penitentiary) given to those dormant pilgrims regarding either their conversion to Christianity⁴⁰ or changing their blamable way of life.⁴¹ Most of the healing dreams took place in the churches of Constantinople, including those of Sts. Cosmas and Damian (known as *Kosmidion*), the church of John the Baptist in Oxeia district which contained St. Artemius' holy relict, the church of St. Michael the Archangel situated in Anaplous outskirts and two churches in Blachernai quarter: one consecrated to St. Lawrence (containing the relics of Prophet Isaiah) and another one in Theotokos Church (containing relics of St. Therapon)⁴². Also there was the church of St. Tecla in Kalykadnos (Seleucia region, Byzantine Empire), the churches of St. Domethius the Persian in Antioch (Syria), the church of Sts. Cosmas and Damian in Cyr (Lebanon), the church of St. Cyrus and John in Menouthis – a suburb of Alexandria (Egypt) – and the church of St. Demetrius in Thessaloniki (Greece).⁴³

³⁹ AUGUSTIN, *Confesiuni*, III, 11, 19, trad., introd., note Eugen Muntean, Ed. Humanitas, București, 2018, p. 147, Anton ADAMUT, *Oneiric Foundations of Philosophy: Saint Augustine*, in: *Meta: Research in Hermeneutics, Phenomenology, and Practical Philosophy*, X (2018), 1, pp. 188-195 (p. 190).

⁴⁰ If the sufferer was not a Christian.

⁴¹ See more in C. I. COLIȚĂ, *Visul taumaturgic...*, pp. 239-251.

⁴² Ildiko CSEPREGI, *The Compositional History of Greek Christian Incubation Miracle Collections: Saint Thecla, Saint Cosmas and Damian, Saint Cyrus and John, Saint Artemios*, PhD Thesis, Budapest, Central European University, 2017, pp. 77-78.

⁴³ See Pierre MARAVAL, *Lieux saints et pèlerinages d'Orient: Histoire et géographie de origins à la conquête arabe*, Paris, Les Éditions du CERF, 1985, pp. 224-225, Gil H. RENBERG, *Where Dreams May Come: Incubation Sanctuaries in the Greco-Roman World*, Brill, Leiden/Boston, 2016, pp. 756, 778, Hedvig VON EHRENHEIM, *Identifying Incubation Areas in Pagan and*

In the Christian West, we count at least 4 famous churches in which the phenomenon of curative dream events has recorded an effervescence similar to the churches of Eastern Christianity. So we are talking about the church of St. Martin of Tours, the church of St. Julian of Brioude, the church of St. Foy of Conques⁴⁴ and the chapel of Santa Maria Antiqua in Rome, the later one having from the 7th century onward several relics of the holy unmercenary physicians that produced healings through dreams, a fact attested by some early icons found in this church⁴⁵. The pagan religions record also a great variety of healing dreams. The most famous extrasensory cures, numbering 70, were transposed around 350 BC on different votive plaques (gr. *iamata*) at the temple of Asklepios in Epidauros (Peloponnese region).⁴⁶

Let us focus over a statistics regarding the *incubatio* wonders in the history of Christianity. Only in the Medieval West of the 5th-12th centuries are recorded 259 dream healings spent in the church dedicated to an unmercenary saint or following explicit dreams at home in which the faithful were healed by the saints in whom they put their hope.⁴⁷ In the Eastern Christianity of Late Antiquity and Early Middle Ages, we have 70 healings occurred at a church in Menouthis (modern Aboukir) dedicated to Saints Cyrus and John. These miraculous events were collected and written in a hagiographic text by Patriarch Sophronius of Jerusalem († 638) in the 7th century.⁴⁸ Moreover, Sophronius himself was miraculously healed of an ophthalmic disease at the church of Menouthis.⁴⁹ It seems also that emperor Justinian I († 565) was healed in a dream by Saints Cosmas and Damian in the *Kosmidion* church from Constantinople (more exactly located in the modern Eyupsultan district in Istanbul) when doctors could not find any cure for the

Christian Times, in: *Proceedings of the Danish Institute at Athens*, VI (2009), pp. 237-276 (pp. 254-264), C. I. COLIȚĂ, *Visul taumaturgic...*, p. 245.

⁴⁴ A se vedea Gábor KLANICZAY, *Healing with Certain Conditions: The Pedagogy of Medieval Miracles*, in: *Journal of Medieval and Humanistic Studies*, XIX (2010), pp. 235-248.

⁴⁵ F. GRAF, *op. cit.*, p. 258.

⁴⁶ Helen ASKITOPOULOU, Eleni KONSOLAKI, Ioanna RAMOUTSAKI et alli, *Surgical Cures under Sleep Induction in the Asclepeion of Epidauros*, in: *International Congress Series*, MCCXLII (2002), pp. 11-17.

⁴⁷ Gábor KLANICZAY, *Dreams and Visions in Medieval Miracle Accounts*, in: William A. Christian, Gabor Klaniczay (eds.), *The Vision Thing. Studying Divine Interventions*, Budapest, Collegium Budapest (2009), 18, pp. 147-170 (p. 149).

⁴⁸ See SOPHRONIUS, *Thaumata*, in: Natalio Fernandez MARCOS, *Los Thaumata de Sofronio: Contribucion al estudio de la incubatio cristiana*, Instituto Antonio de Nebrija, Madrid, 1975, pp. 243-400.

⁴⁹ Gil H. RENBERG, *Where Dreams May Come: Incubation Sanctuaries in the Greco-Roman World*, Brill, Leiden/ Boston, 2016, p. 793.

emperor's illness. In gratitude for the help he received, Justinian ordered the church of his holy healers to be rebuilt and modernized.⁵⁰

Also in the Christian East, the number of dream cures due to the intervention of the holy thaumaturges is also high during the 5th-7th centuries. In addition to the 70 healings performed by Saints Cyrus and John recorded by Sophronis, the Eastern hagiographic texts also testify other 12 dream healings of St. Tecla in Kalykadnos included in the *Life and Miracles of St. Tecla* (written in 5th century).⁵¹ Another 84 wonders took place at the *Kosmidion* church located in Constantinople being described in detail by the hagiographic collection *BHG* 385-392.⁵² Other sources include a number of 45 healing dreams due to St. Artemius spent at the church of St. John the Baptist in Constantinople included in *BHG* 173⁵³, 27 dreamlike miracles due to St. Demetrius of Thessaloniki included in *BHG* 499-523 / *CPG* 7920 (7th century)⁵⁴ and at least 2 oneiric cures attributed to St. Michael the Archangel recorded by the *Ecclesiastic History* written by Sozomenos in the middle 5th century.⁵⁵ Last but not least, we count 19 miracles attributed to the relics of the Prophet Isaiah from the church St. Lawrence in Blachernai (a quarter from Constantinople) described in a 12th century text composed by an anonymous hagiographer who witnessed those wonders.⁵⁶

Actually, the number of these healing dreams is much higher, given the fact that the miraculous healings from these famous churches are the most representative for the case of the Christian incubation first developed in the Eastern Church. But there were certainly other places of worship of lesser importance that witnessed similar cases that the pages of history have never recorded them. Also, the cases we mentioned above were recorded in a certain social and religious context that required the composition of such hagiographic compilations. But generally speaking, righteous people – and especially saints – hide most of the miracles that have happened in their lives, either

⁵⁰ PROCOPIUS OF CAESAREA, *On Buildings*, I, 6, 5-8, transl. H. B. Dewing, Harvard University Press, Cambridge, 1971, pp. 62-63.

⁵¹ Gilbert DAGRON (ed.), *Vie et miracles de sainte Thècle: texte grec, traduction et commentaire*, Bruxelles, Société des Bollandistes, 1978, Scott Fitzgerald JOHNSON, *Life and Miracles of Thekla: A Litrary Study*, Cambridge (M. A.) / London, Harvard University Press, 2006, p. 121, Fritz GRAF, *Roman Festivals in the Greek East: From the Early Empire to the Middle Byzantine Era*, Cambridge University Press, Cambridge, 2015, pp. 258-259.

⁵² G. RENBERG, *op. cit.*, p. 763.

⁵³ *Ibid.*, p. 764.

⁵⁴ *Ibid.*, p. 766.

⁵⁵ SOZOMEN, *The Ecclesiastic History, Comprising a History of the Church from A.D. 324 to A.D. 440*, II, 3, transl. Edward Walford, London, 1855, pp. 53-56.

⁵⁶ See Hippolyte DELEHAYE, *Les recueils antiques de miracles des saints*, in: *Analecta Bollandiana*, XLIII (1925), pp. 5-85, (pp. 39-40) and I. CSEPREGI, *op. cit.*, pp. 77-78.

because of their perfect humbleness or because the wonderful event is far too intimately related to their inner life.

Dreams and holy relics

Especially in the Eastern Church tradition, there are also oneiric discoveries of saintly relics even hundreds of years after their deaths. Thus, the relics of St. Paraskeva from Epivata (today Selimpaşa) buried in the first half of 11th century are found around 1060 AD in a revealing dream of a certain monk Georgios in which an unknown empress (who was in fact Paraskeva) tells him the place where her relics are buried.⁵⁷ We suppose this event occurred in that year because the *Romanian Patericon* indicates us the relics of the saint stayed in the Church of the Holy Apostles from Epivata (in Eastern parts of Byzantine Empire) for 175 years until they were transferred at Veliko Tarnovo (Bulgaria) in 1235.⁵⁸

Also the relics of St. Demetrius Basarabovo († 13th century) are discovered after two centuries from his death following a dream in which the Romanian-Bulgarian saint is revealed to a sick young woman. During their dreamy discussion, the saint promises the healing of the girl, and instead the later one will have to show both to her parents and the locals the exact place where the saint's body was hidden by the Providence in the Lom riverbed for hundreds of years.⁵⁹

Also in the middle of the 20th century, the burial place of St. Ephraim the Martyr († 1426) is discovered in Mother Makaria Desipri's dream. The saint appears to the nun and tells her that his relics have been buried for 500 years near a monastery in Nea Makri (Attica), leading to the discovery of the body and to the development of a special cult in Greece but also in other Orthodox countries (such as Romania). As a result, Ephraim was sanctified in 2011 by the Ecumenical Patriarchate of Constantinople.⁶⁰

Regarding the bond between some saintly relics and the providential dreams, I would like to mention a very important event that I have talked about in my previous works. The event takes place in the life of an 8th century Frankish bishop named Aubert of Avranches († 725) from Northwestern France. One night in 708 AD, the prelate dreams the Archangel Michael ordering him to build a hermitage on Mount Tombe (the future Mont Saint-Michel from Normandy) located in an

⁵⁷ Cf. Pr. Ovidiu MOCEANU, *Visul și împărăția: elemente de teologie a visului*, Ed. Egumenița, Galați, 1998, p. 53.

⁵⁸ See Ioanichie BĂLAN, *Patericul românesc*, Ed. Arhiepiscopiei Tomisului și a Dunării de Jos, Galați, 1990, pp. 80-81.

⁵⁹ Pr. Prof. Dr. Mircea PĂCURARIU, *Sfinți daco-romani și români*, Ed. Mitropoliei Moldovei și Bucovinei, Iași, 1994, pp. 171-175.

⁶⁰ ***, *Viața Sfântului Cuvios Mucenic Efreim cel Nou (5 mai)*, Ed. Institutului Biblic și de Misiune Ortodoxă, București, 2015, pp. 3-7.

estuary next to the city of Avranches. The bishop does not pay attention to that dream, and the Archangel appears on the second evening with the same request, but without any reaction from Aubert. In order to believe St. Michael's request, on the third night, the angelic Taxhiarch touches his fiery finger on the bishop's head. As a result, Aubert wakes up with both an unbearable pain and a mark on his head that will be visible not only during his lifetime, but also on his skull to this day which is found in the church of Sts. Gervasius and Protasius from Avranches.⁶¹

The distinctive sign on the head of St. Aubert was considered real only in terms of faith until some years ago. But in 2019, at the request of Professor Pierre Bouet, a specialized team of researchers analyzed the age of the skull using the technique of dating with Carbon-14/ Radiocarbon. The results were surprising in the eyes of some opponents who initially saw Aubert's head as a trepanated skull from the Neolithic Age. Thus, according to the analysis, the researchers dated the skull between the 660-770 AD, the relic belonging to a man from Merovingian Gaul. This fact attests the veracity of the providential dream spent in the night of 708 which is attested both by the famous architectural miracle of Mont Saint-Michel abbey and by the dating of the head in the period in which bishop Aubert lived (8th century).⁶²

⁶¹ Cezar-Ivan COLIȚĂ, *Arhanghelul Mihail și istoria aparițiilor sale călăuzitoare: pe urmele unui înger călător în cultura și civilizația europeană*, Ed. Herald, București, 2021, pp. 245-247.

⁶² Denis BOUGAULT, Cécile CHAPELAIN DE SEREVILLE-NIEL, Samuel BÉDÉCARRATS, Pierre BOUET, Claire LETREGILLY, *Diagnostic d'une lacune de la voûte crânienne: le cas du crâne dit de "saint Aubert"*, în *Colloque annuel du GPLF*, 25-27 mars 2021 (en distanciel), session 1–Traumas, trépanations et violence: histoire, méthodes et diagnostic, Groupe des paléopathologistes de langue française (GPLF), Mars 2021, Paris – Aubervilliers, France, link access: <https://hal-normandie-univ.archives-ouvertes.fr/hal-03238576>, Nicolas THOMAS, *Avranches. Le crâne de saint Aubert, fondateur du Mont-Saint-Michel, a été daté*, în *La Manche Libre*, published: 17.12.2019, accesat: 06.12.2021, link access: <https://www.lamanchelibre.fr/actualite-815941-avranches-le-crane-de-saint-aubert-fondateur-du-mont-saint-michel-a-ete-date>. See also the discussion in Remus RĂDULESCU, Cezar-Ivan COLIȚĂ, *Pe urmele unui înger călător – Arhanghelul Mihail*, edition of the show *Biserica Azi*, Trinitas TV, April, 06. 2022, accessed April 08. 2022, at: https://www.youtube.com/watch?v=21_pnY7ootw, mins. 47-48, and the study Cezar-Ivan COLIȚĂ, *The Angel of Light in the Dark Ages: the Bond between Archangel Michael and the Formation of European Civilization*, in: *Revista Teologică*, new series, XXX (2021), 3, pp. 49-68 (pp. 54-55), note 21.



Figure 2. **A.** Mont Saint-Michel Abbey today. **B.** Saint Aubert's skull. **C.** The intervention of St. Michael the Archangel in Aubert's dream (sculpture at Mont Saint-Michel). **D.** Saints Aubert and Michael in Christian iconography.⁶³

Conclusions

As we can see from our neuropsychological and theological analysis, there are very few cases which allow us to trust our dreams. There are two scenarios that lead us to have such an attitude. Either we must have a continuous spiritual activity that sanctifies our mind and affections, or having a repetitive dream that tries to convey something important or to urge something we neglect (as is the case of Aubert and Michael). Otherwise, it is quite dangerous to trust our dreamy content. Many have done so and almost lost their minds. It takes a lot of experience in interpreting dreams, but their complete neglectation is a wiser decision, says St. John Climacus.

Cases of mystical and healing dreams listed in this paper show us that this kind of events occur to people who do not seek revelations. On some of the occasions described

⁶³ Internet sources for Figure 2. A.: <https://unsplash.com/photos/EaEEml67Ws8>, B: <https://www.lamanchelibre.fr/actualite-815941-avranches-le-crane-de-saint-aubert-fondateur-du-mont-saint-michel-a-ete-date>, C.: <https://www.obonparis.com/en/magazine/mont-saint-michel-abbey>, D: <https://www.johnsanidopoulos.com/2019/09/saint-aubert-bishop-of-avranches.html>, Accessed 7.4.2022.

above, dreams are just a proof of solving a suffering or finding an answer after a desperate search, as in the case of healing dreams, on the one hand, or the vision of Saint Monica, on the other hand. In other cases, prophetic and precognitive dreams occur in the lives of righteous people, ascetic saints and holy martyrs. As for us, if we experience some possible miraculous dreams, we should have an *x-ray* of our soul. And the best indicator of that *x-ray* is the comparison of our way of life with the lives of the saints who once had such dreamlike revelations. If our lives match the lives of the saints, then the dream can be true. If we fail this test, we should stop looking for miracles.

Although it was not the subject of our discussion, we should also not pay too much attention to visitation dreams (in which we interact with the souls of our deceased realtives). If we take these dreams too seriously, we can easily fall into the trap of spiritism. A good deed done in that person's name combined with a prayer for the one who passed away would be more helpful for that soul instead of establishing some dangerous connections with the world of spirits.

As stressed so far, common dreams are nothing more but an imaginative delirium, an illogical thinking and an infusion of emotional content that wrongly give us the impression of reality while we sleep. Despite all their oddities, dreams present some functional activities that regulate our thinking and behavior in everyday life. Dreams have the role of showing us the face of our true personality with all our pluses and minuses, fears and desires. In other cases, dreams play the role of sedimenting our memories. There are other cases in which the functional role of dreams is to produce the unexpected solution to a theoretical or practical problem in our daily lives. In the case of nightmares, dreams have the role of simulating possible threats in order to be more vigilant and deal with dangerous situations in reality. Since dreams are meant to regulate our mental life and brain activity, mystical dreams are only an exception to the rule and the exception is intended to solve some essential aspects: such as an urgent changing from bad to good.

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